



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,171	04/20/2001	Katsuhiko Torii	02-046	9035

23400 7590 06/05/2002

LAW OFFICE OF DAVID G POSZ  
2000 L STREET, N.W.  
SUITE 200  
WASHINGTON, DC 20036

EXAMINER

ELKASSABGI, HEBA

ART UNIT PAPER NUMBER

2834

DATE MAILED: 06/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/838,171

Applicant(s)

TORII ET AL.

Examiner

Heba Elkassabgi

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the sensing element must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The sensing element of Claim #1 is not disclosed.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made

Art Unit: 2834

to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tilli et al. (U.S. Patent 5907885) and in further view of Peck et al. (U.S. Patent 5111098).

5. Tilli et al. discloses in figure 1 a motor having a worm gear (worm shaft) (63) around an armature shaft (rotor shaft) (15), within a motor case (13). The armature shaft (driving –side rotor)(15) is connected coaxially to the driven-side rotor (worm shaft)(63) and a coupling member (91). A housing (AA) surrounds the coupling member and a driving and driven side rotors. The driving side rotor includes a shaft portion that protrudes from the housing with a space defined between the housing and the coupling member. Furthermore, the coupling member (91), for the purpose of the present invention is to be more acceptable of tolerance variations, such as externally supplied forces from car wash, bumpy roads, or the like. However, Tilli et al. does not disclose a rotational sensor with sensor magnets around the rotor and a Hall sensor

6. Peck et al. discloses in Figure 7 a rotational sensor (speed sensor) (210) that includes sensor magnets (530 and 532), which are arranged integrally with the rotatable shaft (spindle) (214), for the purpose of controlling rotational speed.

7. It would have been obvious to one of ordinary skill in the art to modify Tilli et al. with Peck et al. in order to improve the controlling rotational speed.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tilli et al. (U.S. Patent 5907885) and in further view of Peck et al. (U.S. Patent 5111098) and Klappenbach et al. (U.S. Patent 6201326).

9. Tilli et al. discloses in figure 1 a motor having a worm gear (worm shaft) (63) around an armature shaft (rotor shaft) (15), within a motor case (cup-shaped yoke) (13). The motor case (yoke) has brush holders 925 which face the interior of the yoke. The armature shaft (driving –side rotor)(15) is connected coaxially to the driven-side rotor (worm shaft)(63) and a coupling member (91). A housing (AA) surrounds the coupling member and a driving and driven side rotors. The driving side rotor includes a shaft portion that protrudes from the housing with a space defined between the housing and the coupling member. Furthermore, the coupling member (91), for the purpose of the present invention is to be more acceptable of tolerance variations, such as externally supplied forces from car wash, bumpy roads, or the like. However, Tilli et al. does not disclose a rotational sensor with sensor magnets around the rotor and a Hall sensor.

10. Peck et al. discloses in Figure 7 a rotational sensor (speed sensor) (210) that includes sensor magnets (530 and 532), which are arranged integrally with the rotatable shaft (spindle) (214), for the purpose of controlling rotational speed.

Art Unit: 2834

11. Klappenbach et al. discloses in Figure 3 a Hall sensor (37), for the purpose of detecting the position of the armature.

12. It would have been obvious to one of ordinary skill in the art to modify Tilli et al. with Peck et al. in order to improve the tolerance level of the present invention from external force and Klappenbach et al. for detecting the position of the armature shaft.

### ***Allowable Subject Matter***

Claim 2, 3, 4, 6, and 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is (703) 305-2723. The examiner can normally be reached on M-Th (6:30-3:30), and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3432 for After Final communications.

Application/Control Number: 09/838,171  
Art Unit: 2834

Page 6

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.



NESTOR RAMIREZ  
PATENT EXAMINER  
ENTER 2800

Heba Yousri Elkassabgi

June 3, 2002